

What is claimed is:

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1. 1. A method of updating data installed on a client terminal
2. from a server system via a communication network, comprising:
3. at said client terminal,
 4. (a) storing a version number of the
5. installed data;
 6. (b) transmitting a request message to the server system via
7. the communication network in response to an event triggered by a user
8. of said client terminal, said request message containing the version
9. number of said data and a phone number of said client terminal,
10. at said server system,
 11. (c) storing most recent data and a version number of the
12. most recent data;
 13. (d) receiving the transmitted request and comparing the
14. version number contained in the received request to the stored version
15. number;
 16. (e) transmitting a copy of said most recent data and the
17. version number of the most recent data to said client terminal via the
18. communication network if there is a mismatch between the compared
19. version numbers, and
20. at said client terminal,
 21. (f) receiving the copy of the most recent data and the
22. version number from the server system and updating the installed data
23. with the received copy and updating the stored version number with the
24. received version number.

NE-1024

- 20 -

- 1 2. A method of updating data installed on a client terminal
- 2 from a server system via a communication network, comprising:
 - 3 at said client terminal,
 - 4 (a) transmitting a request message to the server system via
 - 5 the communication network in response to an event triggered by a user
 - 6 of said client terminal, said request message containing a phone number
 - 7 of said client terminal,
 - 8 at said server system,
 - 9 (b) storing most recent data and storing a version number
 - 10 of the most recent data in a first memory and mapping a plurality of
 - 11 version numbers of said data to a plurality of phone numbers in a
 - 12 second memory;
 - 13 (c) receiving the request transmitted from said client
 - 14 terminal and comparing a version number mapped in said second
 - 15 memory corresponding to the phone number contained in the received
 - 16 request to the version number of the most recent data stored in said first
 - 17 memory;
 - 18 (d) if there is a mismatch between the compared version
 - 19 numbers, transmitting a copy of said most recent data to said client
 - 20 terminal via the communication network and updating said
 - 21 corresponding mapped version number in said second memory with the
 - 22 version number of the first memory,
 - 23 at said client terminal,
 - 24 (e) receiving the copy of the most recent data from the
 - 25 server system and updating the installed data with the received copy.

- 1 3. A method of updating a set of data modules installed on a

NE-1024

- 21 -

2 client terminal from a server system via a communication network,
3 comprising:
4 at said client terminal,
5 (a) storing a set of version numbers of the installed data
6 modules;
7 (b) transmitting a request message to the server system via
8 the communication network in response to an event triggered by a user
9 of said client terminal, said request message containing said set of
10 version numbers and a phone number of the client terminal,
11 at said server system,
12 (c) storing a set of most recent data modules and version
13 numbers of the most recent data modules;
14 (d) receiving the transmitted request and comparing the
15 version numbers contained in the received request to the stored version
16 numbers;
17 (e) transmitting a copy of the set of most recent data
18 modules and the version numbers of the most recent data modules to
19 said client terminal via the communication network if there is a
20 mismatch between the compared version numbers, and
21 at said client terminal,
22 (f) receiving the copy of the most recent data modules and
23 the version numbers from the server system and updating the installed
24 set of data modules with the received copy and updating the stored
25 version numbers with the received version numbers.

1 4. A method of updating a set of data modules installed on a
2 client terminal from a server system via a communication network,

NE-1024

- 22 -

3 comprising:

4 at said client terminal,

5 (a) transmitting a request message to the server system via
6 the communication network in response to an event triggered by a user
7 of said client terminal, said request message containing a phone number
8 of said client terminal,

9 at said server system,

10 (b) storing a set of most recent data modules, storing a set of
11 version numbers of the most recent data modules in a first memory, and
12 mapping a plurality of sets of version numbers of data modules of
13 mobile terminals to a plurality of phone numbers of said mobile
14 terminals in a second memory;

15 (c) receiving the request transmitted from said client
16 terminal and comparing a set of version numbers mapped in said
17 second memory corresponding to the phone number contained in the
18 received request to the set of version numbers of the most recent data
19 modules stored in said first memory;

20 (d) if there is a mismatch between the compared version
21 numbers, transmitting a copy of the set of most recent data modules to
22 said client terminal via the communication network and updating the
23 corresponding set of mapped version numbers in said second memory
24 with the version numbers of the first memory,

25 at said client terminal,

26 (e) receiving the copy of the most recent data modules from
27 the server system and updating the installed set of data modules with
28 the received copy.

NE-1024

- 23 -

a 1 5. The method of claim 1, ~~2, 3 or 4~~, further comprising, at said
2 server system, imposing traffic control on the transmission of said copy
3 of most recent data when traffic of the request from said client terminal
4 exceeds a predetermined rate.

u 1 6. The method of claim 1, ~~2, 3 or 4~~, wherein said client terminal
2 is a wireless mobile terminal and said communication network is a
3 mobile communication network.

o 1 7. The method of claim 6, wherein said server system
2 comprises a home location register connected to said mobile
3 communication network and a server connected to said home location
4 register and said network, and wherein said request from the client
5 terminal is a location registration request.

a 1 8. The method of claim 1 ~~or 3~~, wherein the step (c) further
2 comprises, at said server system, receiving new data from a network
3 manager when the network manager makes a change in previous data
4 and storing the new data as said most recent data.

a 1 9. The method of claim 2 ~~or 4~~, wherein the step (b) further
2 comprises, at said server system, receiving new data from a network
3 manager when the network manager makes a change in previous data
4 and storing the new data as said most recent data.

1 10. A method of updating data installed on a client terminal,
2 comprising:

NE-1024

- 24 -

3 at said client terminal,
4 (a) storing a version number of the installed data; and
5 (b) transmitting a request message to a receiving server via
6 a communication network in response to an event triggered by a user of
7 said client terminal, said request message containing the version
8 number of said data and a phone number of the client terminal,
9 at said receiving server,
10 (c) storing a version number of most recent data;
11 (d) receiving the request from the client terminal via the
12 communication network and comparing the version number contained
13 in the received request to the stored version number; and
14 (e) transmitting a download request to a sending server if
15 there is a mismatch between the compared version numbers,
16 at said sending server,
17 (f) storing said most recent data and transmitting a copy of
18 said most recent data and the version number of the most recent data to
19 said client terminal via the communication network in response to said
20 download request from the receiving server, and
21 at said client terminal,
22 (g) receiving the copy of the most recent data and the
23 version number from the sending server and updating the installed data
24 with the received copy and updating the stored version number with the
25 received version number.

1 11. A method of updating data installed on a client terminal,
2 comprising:
3 at said client terminal,

NE-1024

- 25 -

4 (a) transmitting a request message to a receiving server via
5 a communication network in response to an event triggered by a user of
6 said client terminal, said request message containing a phone number of
7 said client terminal,

8 at said receiving server,

9 (b) storing a version number of most recent data in a first
10 memory and mapping a plurality of version numbers of said data to a
11 plurality of phone numbers in a second memory;

12 (c) receiving the request from said client terminal via the
13 communication network and comparing a version number mapped in
14 said third memory corresponding to the phone number contained in the
15 received request to the version number of the most recent data stored in
16 said second memory; and

17 (d) if there is a mismatch between the compared version
18 numbers, transmitting a download request message to a sending server
19 and updating said corresponding mapped version number in said
20 second memory with the version number of the first memory,

21 at said sending server,

22 (e) storing said most recent data and transmitting a copy of
23 said most recent data to said client terminal via the communication
24 network, and

25 at said client terminal,

26 (f) receiving the copy of the most recent data from the
27 sending server and updating the installed data with the received copy.

1 12. The method of claim 10 or 11, further comprising, at said
2 receiving server, imposing traffic control on said download request

NE-1024

- 26 -

3 when traffic of the request from said client terminal exceeds a
4 predetermined rate.

1 13. The method of claim 10 ~~or 11~~, further comprising, at said
2 sending server, imposing traffic control on the transmission of said copy
3 of most recent data when traffic of the download request from said
4 receiving server exceeds a predetermined rate.

1 14. The method of claim 10 ~~or 11~~, wherein said client terminal is
2 a wireless mobile terminal and said communication network is a mobile
3 communication network, and wherein said receiving server is a home
4 location register connected to said network and said sending server, and
5 wherein said request from the client terminal is a location registration
6 request.

1 15. The method of claim 10, wherein the step (f) further
2 comprises, at said sending server, receiving new data from a network
3 manager when the network manager makes a change in previous data
4 and storing the new data as said most recent data.

1 16. The method of claim 11, wherein the step (e) further
2 comprises, at said sending server, receiving new data from a network
3 manager when the network manager makes a change in previous data
4 and storing the new data as said most recent data.

1 17. A client-server system comprising:
2 a client terminal for storing a version number of data installed on

NE-1024

- 27 -

3 the client terminal and transmitting a request message to a
4 communication network in response to an event triggered by a user of
5 said client terminal, said request message containing the version
6 number of said data and a phone number of said client terminal; and
7 a server system for storing most recent data and a version
8 number of the most recent data, receiving said request from the client
9 terminal via said communication network and comparing the version
10 number contained in the received request to the stored version number,
11 and transmitting a copy of said most recent data and the version
12 number of the most recent data to said client terminal via the
13 communication network if there is a mismatch between the compared
14 version numbers,
15 said client terminal receiving the copy of the most recent data
16 and the version number from the server system and updating the
17 installed data with the received copy and updating the stored version
18 number with the received version number.

1 18. A client-server system comprising:
2 a client terminal for transmitting a request message to a
3 communication network in response to an event triggered by a user of
4 said client terminal, said request message containing a phone number of
5 said client terminal,
6 a server system for storing most recent data and a version
7 number of the most recent data in a first memory and mapping a
8 plurality of version numbers of said data to a plurality of phone
9 numbers in a second memory, receiving said request from said client
10 terminal via said communication network, comparing a version number

NE-1024

- 28 -

11 mapped in said second memory corresponding to the phone number
12 contained in the received request to the version number of the most
13 recent data stored in said first memory, and transmitting a copy of said
14 most recent data to said client terminal via the communication network
15 and updating said corresponding mapped version number in said
16 second memory with the version number of the first memory if there is a
17 mismatch between the compared version numbers,
18 said client terminal receiving the copy of the most recent data
19 from the server system and updating the installed data with the
20 received copy.

1 19. A client-server system comprising:
2 a client terminal for storing a set of version numbers of data
3 modules installed on the client terminal, transmitting a request message
4 to a communication network in response to an event triggered by a user
5 of said client terminal, said request message containing said set of
6 version numbers and a phone number of the client terminal;
7 a server system for storing a set of most recent data modules and
8 version numbers of the most recent data modules, receiving the request
9 from the client terminal via said communication network, comparing
10 the version numbers contained in the received request to the stored
11 version numbers, and transmitting a copy of the set of most recent data
12 modules and the version numbers of the most recent data modules to
13 said client terminal via the communication network if there is a
14 mismatch between the compared version numbers;
15 said client terminal receiving the copy of the most recent data
16 modules and the version numbers from the server system and updating

NE-1024

- 29 -

17 data modules installed on the client terminal with the received copy and
18 updating the stored version numbers with the received version
19 numbers.

1 20. A client-server system comprising:
2 a client terminal for transmitting a request message to a
3 communication network in response to an event triggered by a user of
4 said client terminal, said request message containing a phone number of
5 said client terminal; and
6 a server system for storing a set of most recent data modules,
7 storing a set of version numbers of the most recent data modules in a
8 first memory, mapping a plurality of sets of version numbers of data
9 modules of mobile terminals to a plurality of phone numbers of said
10 mobile terminals in a second memory, receiving the request transmitted
11 from said client terminal and comparing a set of version numbers
12 mapped in said second memory corresponding to the phone number
13 contained in the received request to the set of version numbers of the
14 most recent data modules stored in said first memory, and transmitting
15 a copy of the set of most recent data modules to said client terminal via
16 the communication network and updating the corresponding set of
17 mapped version numbers in said second memory with the version
18 numbers of the first memory if there is a mismatch between the
19 compared version numbers,
20 said client terminal receiving the copy of the most recent data
21 modules from the server system and updating data modules installed on
22 the client terminal with the received copy.

NE-1024

- 30 -

① 21. The system of claim 17, ~~18, 19 or 20~~, wherein said server
2 system is configured to impose traffic control on the transmission of said
3 copy of most recent data when traffic of the request from said client
4 terminal exceeds a predetermined rate.

② 22. The system of claim 17, ~~18, 19 or 20~~, wherein said client
2 terminal is a wireless mobile terminal and said communication network
3 is a mobile communication network.

③ 23. The system of claim 22, wherein said server system
2 comprises a home location register connected to said mobile
3 communication network and a server connected to said home location
4 register and said network, and wherein said request from the client
5 terminal is a location registration request.

④ 24. The method of claim 17, ~~18, 19 or 20~~, wherein said server
2 system is configured to receive new data from a network manager when
3 the network manager makes a change in previous data and storing the
4 new data as said most recent data.

⑤ 25. A client-server system comprising:
2 a client terminal for storing a version number of data installed on
3 the client terminal, and transmitting a request message to a
4 communication network in response to an event triggered by a user of
5 said client terminal, said request message containing the version
6 number of said data and a phone number of the client terminal; and
7 a receiving server for storing a version number of most recent

NE-1024

- 31 -

8 data, receiving the request from the client terminal via the
9 communication network, comparing the version number contained in
10 the received request to the stored version number, and transmitting a
11 download request to a sending server if there is a mismatch between the
12 compared version numbers,

13 said sending server storing said most recent data and
14 transmitting a copy of said most recent data and the version number of
15 the most recent data to said client terminal via the communication
16 network in response to said download request from the receiving server,

17 said client terminal receiving the copy of the most recent data
18 and the version number from the sending server and updating the
19 installed data with the received copy and updating the stored version
20 number with the received version number.

1 26. A client-server system comprising:

2 a client terminal for transmitting a request message to a
3 communication network in response to an event triggered by a user of
4 said client terminal, said request message containing a phone number of
5 said client terminal;

6 a receiving server for storing a version number of most recent
7 data in a first memory and mapping a plurality of version numbers of
8 said data to a plurality of phone numbers in a second memory, receiving
9 the request from said client terminal via the communication network
10 and comparing a version number mapped in said third memory
11 corresponding to the phone number contained in the received request to
12 the version number of the most recent data stored in said second
13 memory, and transmitting a download request message to a sending

14 server and updating said corresponding mapped version number in said
15 second memory with the version number of the first memory if there is
16 a mismatch between the compared version numbers,
17 said sending server storing said most recent data and
18 transmitting a copy of said most recent data to said client terminal via
19 the communication network,
20 said client terminal receiving the copy of the most recent data
21 from the sending server and updating the installed data with the
22 received copy.

1 27. The system of claim 25 ~~or 26~~, wherein said receiving server
2 is configured to impose traffic control on said download request when
3 traffic of the request from said client terminal exceeds a predetermined
4 rate.

1 28. The system of claim 25 ~~or 26~~, wherein said sending server is
2 configured to impose traffic control on the transmission of said copy of
3 most recent data when traffic of the download request from said
4 receiving server exceeds a predetermined rate.

1 29. The system of claim 25 ~~or 26~~, wherein said client terminal is
2 a wireless mobile terminal and said communication network is a mobile
3 communication network, and wherein said receiving server is a home
4 location register connected to said network and said sending server, and
5 wherein said request from the client terminal is a location registration
6 request.

NE-1024

- 33 -

a 1 30. The system of claim 25 ~~or 26~~, wherein said sending server is
2 configured to receive new data from a network manager when the
3 network manager makes a change in previous data and store the new
4 data as said most recent data.

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